Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. 1.   (original)   A method of accessing a first file on a disk system on one of a
2.   plurality of computer systems from a program executing on another of the
3.   plurality of computer systems, wherein:
4.   the plurality of computer systems comprises:
5.   a first computer system containing the program communicating through an
6.   API with a first interface system, and
7.   a second computer system containing the disk system and a second
8.   interface system for communicating with the first interface system
9.   and for reading from and writing to the disk system;
10.   the first computer system and the second computer system are heterogeneous
11.   computer systems;
12.   said method comprising:
13.   A) opening a first session from the program via the API through the first interface
14.   system to the second interface system in order to access the first file on the
15.   disk system;
16.   B) blocking the first plurality of records into a first plurality of blocks;
17.   C) transmitting the first plurality of blocks over the first session from a first one
18.   of the plurality of computer systems to a second one of the plurality of
19.   computer systems;
20.   D) unblocking the first plurality of blocks into a second plurality of records on
21.   the second one of the plurality of computer systems; and
22.   E) closing the first session after completing the transmitting in step (C).

1   2.   (original)   The method in claim 1 wherein:

2   the first computer system is the first of the plurality of computer systems;

3   the second computer system is the second of the plurality of computer systems;

4   and

5   the method further comprises:

6   F)   receiving the first plurality of records via the API from the

7   program; and

8   G)   writing the second plurality of records to the first file.

1   3.   (original)   The method in claim 1 wherein:

2   the first computer system is the second of the plurality of computer systems; and

3   the second computer system is the first of the plurality of computer systems;

4   the method further comprises:

5   F)   reading the first plurality of records from the first file; and

6   G)   receiving the second plurality of records in the program via the

7   API.

1   4.   (currently amended)   The method in claim 1 wherein:

2   the transmitting in step (C) utilizes a credit based flow control mechanism to flow

3   control the first plurality of blocks; and

4   the credit based flow control mechanism utilizes a block based credit counting

5   each of the first plurality of blocks a as one credit.

5. (original)   The method in claim 1 which further comprises:

F) opening a second session from the program via the API through the first interface system to the second interface system in order to access a second file on the disk system while the first session is still open;

G) blocking a third plurality of records into a second plurality of blocks;

H) transmitting the second plurality of blocks over the second session from a third one of the plurality of computer systems to a fourth one of the plurality of computer systems;

I) unblocking the second plurality of blocks into a fourth plurality of records on the fourth one of the plurality of computer systems; and

J) closing the second session after completing the transmitting closing the second session after completing the transmitting over the second session in step (H).

6. (original)   The method in claim 5 wherein:

the first computer system is the first one of the plurality of computer systems and the third one of the plurality of computer systems;

the second computer system is the second one of the plurality of computer systems and the fourth one of the plurality of computer systems; and

the method further comprises:

K)   receiving the first plurality of records via the API from the program for transmission over the first session;

L)   receiving the third plurality of records via the API from the program for transmission over the second session;

M)   writing the second plurality of records to the first file; and

N)   writing the fourth plurality of records to the second file.

1 7. (original) The method in claim 5 wherein:
2 the first computer system is the first one of the plurality of computer systems and
3   the fourth one of the plurality of computer systems;
4 the second computer system is the second one of the plurality of computer
5   systems and the third one of the plurality of computer systems; and
6 the method further comprises:
7   K) receiving the first plurality of records via the API from the
8   program for transmission over the first session;
9   L) writing the second plurality of records to the first file;
10   M) reading the third plurality of records from the second file; and
11   N) receiving the fourth plurality of records in the program via the API.

1 8. (original) The method in claim 1 wherein:
2 the first computer system is a mainframe computer system; and
3 the second computer system is a UNIX based computer system.

1 9. (original) The method in claim 1 wherein:
2 character data is stored in the first computer system in a first one of a plurality of
3   character formats;
4 character data is stored in the second computer system in a second one of a
5   plurality of character formats; and
6 the method further comprises:
7 F) translating at least a portion of each of the records in the first plurality of
8   blocks from one of the plurality of character formats to another one of the
9   plurality of character formats.

1 10. (original) The method in claim 1 wherein:
2 integer data is stored in the first computer system in a first one of a plurality of
3   integer formats;
4 integer data is stored in the second computer system in a second one of a plurality
5   of integer formats; and
6 the method further comprises:
7 F) translating at least a portion of each of the records in the first plurality of
8   blocks from one of the plurality of integer formats to another one of the
9   plurality of integer formats.

1 11. (original) A data processing system having software stored in a set of

2 Computer Software Storage Media for accessing a first file on a disk system on

3 one of a plurality of computer systems from a program executing on another of

4 the plurality of computer systems, wherein:

5 the plurality of computer systems comprises:

6   a first computer system containing the program communicating through an

7   API with a first interface system, and

8   a second computer system containing the disk system and a second

9   interface system for communicating with the first interface system

10   and for reading from and writing to the disk system;

11 the first computer system and the second computer system are heterogeneous

12   computer systems;

13 said software comprising:

14 A) a set of computer instructions for opening a first session from the program

15   through the first interface system to the second interface system in order to

16   access the first file on the disk system;

17 B) a set of computer instructions for blocking the first plurality of records into a

18   first plurality of blocks;

19 C) a set of computer instructions for transmitting the first plurality of blocks over

20   the first session from a first one of the plurality of computer systems to a

21   second one of the plurality of computer systems;

22 D) a set of computer instructions for unblocking the first plurality of blocks into a

23   second plurality of records on the second one of the plurality of computer

24   systems; and

25 E) a set of computer instructions for closing the first session after completing the

26   transmitting in set (C).

1   12.   (original)   The software in claim 11 wherein:

2   the first computer system is the first of the plurality of computer systems;

3   the second computer system is the second of the plurality of computer systems;

4   and

5   the software further comprises:

6   F)   a set of computer instructions for receiving the first plurality of

7   records via the API from the program; and

8   G)   a set of computer instructions for writing the second plurality of

9   records to the first file.

1   13.   (original)   The software in claim 11 wherein:

2   the first computer system is the second of the plurality of computer systems; and

3   the second computer system is the first of the plurality of computer systems;

4   the software further comprises:

5   F)   a set of computer instructions for reading the first plurality of

6   records from the first file; and

7   G)   a set of computer instructions for receiving the second plurality of

8   records in the program via the API.

1   14.   (currently amended)   The software in claim 11 wherein:

2   the transmitting in set (C) utilizes a credit based flow control mechanism to flow

3   control the first plurality of blocks; and

4   the credit based flow control mechanism utilizes a block based credit counting

5   each of the first plurality of blocks ~~a~~ as one credit.

1 15. (original) The software in claim 11 which further comprises:
2   F) a set of computer instructions for opening a second session from the program
3   via the API through the first interface system to the second interface
4   system in order to access a second file on the disk system while the first
5   session is still open;
6   G) a set of computer instructions for blocking a third plurality of records into a
7   second plurality of blocks;
8   H) a set of computer instructions for transmitting the second plurality of blocks
9   over the second session from a third one of the plurality of computer
10   systems to a fourth one of the plurality of computer systems;
11   I) a set of computer instructions for unblocking the second plurality of blocks
12   into a fourth plurality of records on the fourth one of the plurality of
13   computer systems; and
14   J) a set of computer instructions for closing the second session after completing
15   the transmitting closing the second session after completing the
16   transmitting over the second session in set (H).

1 16. (original) The software in claim 15 wherein:
2   the first computer system is the first one of the plurality of computer systems and
3   the third one of the plurality of computer systems;
4   the second computer system is the second one of the plurality of computer
5   systems and the fourth one of the plurality of computer systems; and
6   the software further comprises:
7   K) a set of computer instructions for receiving the first plurality of
8   records via the API from the program for transmission over the
9   first session;
10   L) a set of computer instructions for receiving the third plurality of
11   records via the API from the program for transmission over the
12   second session;
13   M) a set of computer instructions for writing the second plurality of
14   records to the first file; and
15   N) a set of computer instructions for writing the fourth plurality of
16   records to the second file.

1 17. (original) The software in claim 15 wherein:
2 the first computer system is the first one of the plurality of computer systems and
3 the fourth one of the plurality of computer systems;
4 the second computer system is the second one of the plurality of computer
5 systems and the third one of the plurality of computer systems; and
6 the software further comprises:
7 K) a set of computer instructions for receiving the first plurality of
8 records via the API from the program for transmission over the
9 first session;
10 L) a set of computer instructions for writing the second plurality of
11 records to the first file;
12 M) a set of computer instructions for reading the third plurality of
13 records from the second file; and
14 N) a set of computer instructions for receiving the fourth plurality of
15 records in the program via the API.

1 18. (original) The software in claim 11 wherein:
2 the first computer system is a mainframe computer system; and
3 the second computer system is a UNIX based computer system.

1 19. (currently amended) The software in claim ~1 11 wherein:
2 character data is stored in the first computer system in a first one of a plurality of
3 character formats;
4 character data is stored in the second computer system in a second one of a
5 plurality of character formats; and
6 the software further comprises:
7 F) a set of computer instructions for translating at least a portion of each of the
8 records in the first plurality of blocks from one of the plurality of character
9 formats to another one of the plurality of character formats.

1   20.   (currently amended)   The software in claim ~~1~~ 11 wherein:

2   integer data is stored in the first computer system in a first one of a plurality of

3   integer formats;

4   integer data is stored in the second computer system in a second one of a plurality

5   of integer formats; and

6   the software further comprises:

7   F) a set of computer instructions for translating at least a portion of each of the

8   records in the first plurality of blocks from one of the plurality of integer

9   formats to another one of the plurality of integer formats.

21. (original)   A computer readable Non-Volatile Storage Medium encoded with
software for accessing a first file on a disk system on one of a plurality of
computer systems from a program executing on another of the plurality of
computer systems, wherein:

the plurality of computer systems comprises:

a first computer system containing the program communicating through an
   API with a first interface system, and

a second computer system containing the disk system and a second
   interface system for communicating with the first interface system
   and for reading from and writing to the disk system;

the first computer system and the second computer system are heterogeneous
   computer systems;

said software comprising:

A) a set of computer instructions for opening a first session from the program
   through the first interface system to the second interface system in order to
   access the first file on the disk system;

B) a set of computer instructions blocking the first plurality of records into a first
   plurality of blocks;

C) a set of computer instructions for transmitting the first plurality of blocks over
   the first session from a first one of the plurality of computer systems to a
   second one of the plurality of computer systems;

D) a set of computer instructions for unblocking the first plurality of blocks into a
   second plurality of records on the second one of the plurality of computer
   systems; and

E) a set of computer instructions for closing the first session after completing the
   transmitting in set (C).

1   22.   (original)   A data processing system having software stored in a set of

2   Computer Software Storage Media for accessing a first file on a disk system on

3   one of a plurality of computer systems from a program executing on another of

4   the plurality of computer systems, wherein:

5   the plurality of computer systems comprises:

6   a first computer system containing the program communicating through an

7   API with a first interface system, and

8   a second computer system containing the disk system and a second

9   interface system for communicating with the first interface system

10   and for reading from and writing to the disk system;

11   the first computer system and the second computer system are heterogeneous

12   computer systems;

13   said software comprising:

14   A) means for opening a first session from the program through the first interface

15   system to the second interface system in order to access the first file on the

16   disk system;

17   B) means for blocking the first plurality of records into a first plurality of blocks;

18   C) means for transmitting the first plurality of blocks over the first session from a

19   first one of the plurality of computer systems to a second one of the

20   plurality of computer systems;

21   D) means for unblocking the first plurality of blocks into a second plurality of

22   records on the second one of the plurality of computer systems; and

23   E) means for closing the first session after completing the transmitting in means

24   (D).